IN THE CLAIMS:

Please amend the claims as follows:

1. (previously presented) A processing apparatus comprising:

a process chamber made of metal for applying a process to an object to be processed placed in the process chamber by supplying a process gas to the object to be processed;

a placement stage made of ceramics or a metal matrix composite located inside the process chamber so that the object to be processed is placed thereon;

a heating device incorporated into the placement stage;

a support member made of a metal matrix composite for supporting said placement stage; and

a seal member located between said support member and a wall surface of said process chamber;

wherein said support member is formed as a part of a wall of said process chamber.

2. (original) The processing apparatus as claimed in claim 1, wherein said support member is joined to a surface of said placement stage opposite to a surface on which the object to be processed in placed.

3. (original) The processing apparatus as claimed in claim 1, wherein said support member has a substantially flat shape, and an entire surface of said

placement stage opposite to a surface on which the object to be processed in placed is joined to a flat surface of said support member.

4. (canceled)

5. (original) The processing apparatus as claimed in claim 4, wherein said support member is formed as a bottom plate of said process chamber.

6. (previously presented) The processing apparatus as claimed in claim 9, wherein said cooling mechanism includes a coolant passage formed in said support member.

7. (previously presented) The processing apparatus as claimed in claim 9, wherein said cooling mechanism includes a coolant passage formed in a wall of said process chamber.

8. (original) The processing apparatus as claimed in claim 1, wherein said support member is joined to said placement stage by blazing.

9. (previously presented) The processing apparatus as claimed in claim 1, further comprising:

a cooling mechanism located in the vicinity of said seal member so as to cool said seal member.

10. (new) The processing apparatus as claimed in claim 1, wherein said placement stage is joined to said support member by interposing a powder of titanium therebetween and heating at a temperature of 700°C to 900°C in a nitrogen atmosphere.